

## **AMENDMENTS TO THE SPECIFICATION**

### **In the Brief Description of the Drawings:**

Please replace the paragraph beginning on page 6, line 16 with the following paragraph:

-- FIG. 4 is a simplified schematic illustration which shows the relationship between the output drivers, the socket contacts and the receiver latches. --

### **In the Detailed Description of the Invention:**

Please replace the paragraph beginning on page 6, line 24 with the following paragraph:

-- In order to electronically determine the connectivity between one port to another, it is generally well understood that an electrical conductor needs to connect one port to the other. Although this principle is well known, in the modern era where many of the standardized cables such as RJ11 and RJ45 are used, it is difficult to provide this dedicated conductor for connectivity-scanning purposes because each of the wires within the cable is used for a standardized purpose which may interfere with the connectivity-scanning operation. Although it may be possible to share an existing wire in the cable for the scanning operation, this would require additional circuitry for differentiating between the signals used for the scanning purposes and the signals used for other purposes such as data transfer. Moreover, in many cases, it may be impossible to effectively share an existing wire or conductor. --

Please replace the paragraph beginning on page 8, line 8 with the following paragraph:

-- Now referring to FIG. 2, a plurality of RJ45 sockets is shown which are standard sockets which mate with a standard RJ45 jack. The sockets may be ports for a network equipment such as a 10 Base-T hub, PABX, and key-phone system, or may be part of a patch panel, though a special patch panel is not required for a successful operation of the present system. To provide a contact point for the external contact 8 of the adaptor jacket 7, an adapter

board 14 is provided above the sockets 12 with each of the sockets 12 having a socket contact 15 adjacent thereto. The socket contact 15 is positioned such that when the RJ45 jack 5 having the adapter jacket 7, as shown in FIG. 1B, is inserted into a socket 12 of FIG. 2, the contact 8 of the adapter jacket 7 electrically mates with the socket contact 15 of the adapter board 14. Although here the adapter board 14 is shown to carry a plurality of socket contacts 15, it is entirely possible, and sometimes desirable, to have an adapter board 14 which carries only one socket contact which is used on a single isolated socket. --

Please replace the paragraph beginning on page 9, line 19 with the following:

-- Now to describe the system 1 in greater detail, the adapter board 14 shown in FIG. 3 is placed over port sockets (not shown in FIG. 3 but shown in FIG. 2). The micro-processor 21 has pre-designated one output driver as a first driver and the socket contact which it is connected to as the first contact. The latch in the input module 19 which is connected to the designated first contact is designated as the first latch. The port corresponding to the first socket contact is considered to be the first port. Another driver is pre-designated as a second driver, and its corresponding socket contact is designated as a second contact and its corresponding latch is designated as a second latch. The same designation scheme is applied to third, fourth, fifth, and so on, driver/contact/latch groupings such that all groups are uniquely designated. Of course, the designations are somewhat arbitrary and the particular designation number or scheme is not important so long as the individual groupings are uniquely traceable by the micro-controller 21.

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